METHOD OF TRACKING TAXABLE EVENTS

Field of the Invention

The field of the invention relates to accounting and more particularly to the tracking of taxable events.

Background of the Invention

Methods of tracking taxable events are generally known. Typically, such methods rely upon a merchant to manually summarize the transaction using a pen and paper and to send the summary to an accountant. Often, the summary would lack the name of the buyer and only include a description of the product sold.

Such practices have worked in the past because merchants only sold products from a few static locations. Taxes were easy to calculate because it was always clear what taxing body had jurisdiction and what tax rate was applicable.

However, as the world has become more mobile, it has become more difficult to track when taxes are due and who is to receive the tax. In the past, when a seller entered the place of business of the buyer and presented cash, it was usually clear what tax law applied.

More recently, as it becomes more common to place orders by phone, fax or the Internet, it becomes much less clear. For example, where a buyer contacts a seller through the Internet and purchases a downloadable product (e.g., software, digital music, etc.), neither party need know the physical location of the other party. In such a case, it becomes impossible to determine what tax is owed and to whom.

As the frequency of such occurrence rise, a greater proportion of tax money is siphoned away from government. To make up for the rise in this type of untraceable transaction, it becomes necessary to tax traceable transactions at a higher rate, thereby reducing the competitiveness of businesses doing face-to-face transactions. Because of the importance of commerce and the taxes generated by commerce, a need exists for a better method of tracing such transactions.

Brief Description of the Drawings

FIG. 1 is a block diagram of apparatus for tracking taxable events in accordance with an illustrated embodiment of the invention;

FIG. 2 is a screen that may be presented by a website of the system of FIG. 1;

FIG. 3 depicts a summary purchase screen that may be used by the system of FIG. 1;

FIG. 4 depicts a message packet that may be used by the system of FIG. 1; and

FIG. 5 is a block diagram of a third party database used by the system of FIG. 1.

Summary

A method and apparatus are provided for tracking taxes due on a transaction. The method includes the steps of transferring a summary of the transaction from a seller of the transaction to a database of a third party and transferring a summary of the transaction from a buyer of the transaction to the database of the third party. The method further includes the steps of identifying a subject matter of the transaction, determining a local of the buyer and the seller to the transaction and calculating a tax due based upon the

identified subject matter and determined local of the buyer and seller.

Detailed Description of a Preferred Embodiment

FIG. 1 is a block diagram of a system 10, shown generally, for tracking taxable events in accordance with an illustrated embodiment of the invention. Included within the system 10 may be a number of merchants (sellers) doing business through sellers central processing units (CPUs) 26 (one shown in FIG. 1) and a number of buyers using CPUs 12, 18. Buyers 12, 18 and sellers 26 may be able to negotiate sales through the Internet 26 or any other appropriate communications medium (e.g., telephone, facsimile, a local area network (LAN), a wide area network (WAN), Ethernet, etc.).

Sellers 26 may advertise product using any of a number of different formats (e.g., mass media advertising campaigns, mailings, product literature displayed on a web site, e-mail proposals, etc.). Once a buyer 12, 18 has been apprised of a product, the buyer 12, 18 and seller 26 may negotiate sales terms under appropriate format (e.g., interactive webpage, e-mail exchange, telephone, facsimile exchange, etc.).

Similarly, arrangement for payment for purchased product may be made using any appropriate medium (e.g., interactive webpage, e-mail, telephone call, etc.) based upon an open account, credit card, debit card. Payment may also be made by check or cash.

As a simplified example, a buyer 12, 18 may access a website 34 of the seller 26 using a simple web browser and be presented with a product selection webpage 50 (FIG. 2). Within the product selection webpage 50 may be product descriptive information 52, 54 of any of a number of different products. Included within the

product descriptive information 52, 54 may be a product description 56, 60 and a price 58, 62.

To make product selection, the buyer 12, 18 upon viewing the product literature through a display 14, 20, may place a cursor 70 over a select button 64, 66 and select one or more products 52, 54. Upon completion of a session, the buyer 12, 18 may place the cursor 70 over a DONE button 68 to complete a purchase.

Upon selecting the DONE button 68, the summary screen 80 of FIG. 3 may be transmitted from the website 34 to the buyer 12, 18 for presentation on the display 14, 20 of the buyer 12, 18. Included within the summary screen 80 may be an entry 82, 84 for each purchase.

Also included on the summary screen 80 may be a request for a mode of payment. To select a mode of payment, the buyer 12, 18 may place the cursor 70 over an entry window 90, 92, 94 and enter a credit card number. Upon entry of a credit card number the buyer 12, 18 may activate a SUBMIT button 96.

Upon activation of the SUBMIT button 96, the summary page 80 may be forwarded to the CPU 26 for processing. The CPU 26 may verify the credit of the buyer 12, 18. Upon satisfying any internal requirements, the CPU 26 may transmit a copy of the webpage 80 back to the buyer 12, 18 with a highlighted PURCHASE ACCEPTED notice 98.

To conform with applicable tax laws both the seller 26 and the buyer 12, 18 transmit summaries of the purchase to a secure database 36. As used herein, a secure database means a database under the control of a third party (e.g., a third party tax auditor, third party database provider, etc.). A secure database may also be a captive database of the seller with security

features which prevents alteration of data or which provides an audit trail of data which has been altered.

The CPU 26 and CPU 12, 18 receive the information of the summary page 80 and compose a packet message 100 (FIG. 4) for transmission to the database 36. Included within the message 100 may be an Internet protocol (IP) address 102 of the database 36. Also included may be an identifier of the seller (SID) 104. The SID 104 may be any appropriate identifier of the seller (e.g., an IP address, a geographic address with zip code, etc.).

Also included within the packet message 100 may be a buyer's identifier (BID) 106. As with the seller, the BID 106 may be any appropriate identifier of the seller (e.g., an IP address, a geographic address with zip code, etc.).

Finally, the packet message 100 may include a sales price (SP) 108 and product identifier (PID) 110. The sales price may be included for calculation of a sales tax. The PID 110 may be included for purposes of tax multipliers (e.g., on tobacco, liquor, etc.). The PID 106 may be a Universal Product Code (UPC) identifier or any other universally recognized identifier code.

Upon preparation of the message 100, a communication processor 40, 42, 44 transfers the message 100 from the buyers 12, 18 and seller 26 to the third party database 36. Upon receipt by the database 36, the message 100 may be stored in memory 120 or processed immediately.

When processed, the message 100 may be parsed and the components 104, 106, 108, 110 are used for different parts of the tax calculation for the purchase. For example, the PID 110 may be used as a search term for entry into a subject matter (SM) database 122. Within

the SM database 122, the PID 110 may be used to retrieve a tax rate for the subject matter of the purchase.

The BID 106 and SID 104 may be used to access an address database 124 or (where used) a zip code cross reference 132 to identify a local of both buyer and seller. The address database 124 may be used to identify a municipality to identify any applicable tax adders and the dividing lines between taxing entities. The zip code cross-reference may be used for the same purpose, except by starting with a different type of identifier.

Once, the locals of the buyer and seller have been identified and the subject matter of the transaction identified, the information may be transferred to a tax processor 126. Within the tax processor 126 the total tax on the purchase may be determined based upon the transferred information. It is anticipated that in some locals, a tax will be due for both the seller's local and the buyer's local. In other tax areas, the buyer or seller's local may receive the tax. The subject matter of the transaction may affect each calculation.

Once a tax is calculated, the tax due may be, again, stored in memory 120. Periodically, a summary of the tax due may be prepared by a summary processor 130 and forwarded to the seller 26. The summary may be broken down by time period and also based upon the entity to which the tax is due.

While the message 100 transferred from both the seller 26 and buyer 12, 18 to the database 36 may be redundant, the redundancy serves an important purpose by improving the reliability of the system 10. Accordingly, where a first message 100 is located, a CPU 38 of the database 36 automatically searches for its copy. Since Internet packets typically contain both

source and destination information, the CPU 38 may use the presence of any unmatched message 100 as an indication of a malfunction within a CPU of a second party to the transaction.

Where the source information of the packet 100 matches the BID 106, the CPU 38 may determine simply generate a malfunction message for handling by others. However, when the source information of the packet 100 matches that of the SID 104, this could be the indication of a malfunction in the CPU 26 of the seller or an indication that the seller is attempting to commit fraud. Based upon this information, appropriate measures may be taken.

In another illustrated embodiment of the system 10, the transaction may be consummated by methods other than a web browser and the Internet (e.g., by telephone, facsimile, e-mail, etc.). For example, a purchase may be completed by telephone or by e-mail without the formal screens of the website 34. In those cases, the CPUs of the buyer 12, 18 and seller 26 may be manually triggered to provide the screen 80. Information regarding the purchase may be entered. The SUBMIT button 96 in this case trigger the CPU 12, 18, 26 to compose the packet 100. The packet 100 may then be transferred to the database 36 and the process may be repeated as above.

The use of the database 36 has important implications for both buyer and seller. For buyers, the database may be used as a convenient source of information on purchases for tax purposes. It may also be used for detecting credit card fraud.

For example, duplicate charges from the same seller may be regarded as evidence of fraud. The tracing of charging patterns by time of day, geographic area or

account number may provide further evidence. The detection of charges on a single account, closely related in time from geographically diverse locations may provide other evidence.

Sellers benefit from the convenience of a single source for tax payment information. Tax audits may become less necessary because of the additional reliability provided by cross-checked buyer and seller messages.

The third party database 36 may cover expenses by imposing a nominal charge on each seller 26. Further revenue may be derived from the vast quantities of consumer buying information generated and which may then be sold under certain conditions to marketing organizations.

A specific embodiment of a method and apparatus for tracking taxable events according to the present invention has been described for the purpose of illustrating the manner in which the invention is made and used. It should be understood that the implementation of other variations and modifications of the invention and its various aspects will be apparent to one skilled in the art, and that the invention is not limited by the specific embodiments described. Therefore, it is contemplated to cover the present invention and any and all modifications, variations, or equivalents that fall within the true spirit and scope of the basic underlying principles disclosed and claimed herein.